



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER OF PATENTS AND TRADEMARKS  
Washington, D.C. 20231  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/485,034	02/02/2000	ROBERT JOHN BLYTHE	PAR20013	1407

7590

04/09/2003

FAY SHARPE FAGAN MINNICH & MCKEE  
1100 SUPERIOR AVENUE  
SEVENTH FLOOR  
CLEVELAND, OH 44114-2518

EXAMINER

GRAY, JILL M

ART UNIT

PAPER NUMBER

1774

15

DATE MAILED: 04/09/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.

09/485,034

Applicant(s)

BLYTHE, ROBERT JOHN

Examiner

Jill M Gray

Art Unit

1774

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on December 30, 2002.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-26 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-26 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.  
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

## Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☐ All b) ☐ Some \* c) ☐ None of:  
1. ☐ Certified copies of the priority documents have been received.  
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).  
\* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).  
a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

## Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_\_
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) \_\_\_\_\_ 6) ☐ Other: \_\_\_\_\_

## **DETAILED ACTION**

### ***Response to Arguments***

1. In view of the appeal brief filed on December 30, 2002, PROSECUTION IS HEREBY REOPENED. New grounds of rejection are set forth below.

To avoid abandonment of the application, appellant must exercise one of the following two options:

(1) file a reply under 37 CFR 1.111 (if this Office action is non-final) or a reply under 37 CFR 1.113 (if this Office action is final); or,

(2) request reinstatement of the appeal.

If reinstatement of the appeal is requested, such request must be accompanied by a supplemental appeal brief, but no new amendments, affidavits (37 CFR 1.130, 1.131 or 1.132) or other evidence are permitted. See 37 CFR 1.193(b)(2).

The rejection of claims 1, 7, 10, 15, 17, 19, and 23-26 under 35 U.S.C. 102(b) as being anticipated by Thelen et al, 4,564,310 is withdrawn in view of applicants arguments.

The rejection of claims 1-26 under 35 U.S.C. 102(b) as being anticipated by PCT Publication WO 92/19669, Bowers is withdrawn in view of applicant arguments.

### ***Claim Rejections - 35 USC § 102***

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. Claims 1-6, 10-15, and 17-26 are rejected under 35 U.S.C. 102(b) as being anticipated by Japanese Patent translation JP 4048927 (hereinafter Kobayashi).

Kobayashi teaches an elastic paving surface that can be used in sport facilities, wherein said elastic paving surface is comprised of thermoplastic elastomer chips having a size range of 1mm or more as required by claim 1 and 5-6. See page 6. Said chips necessarily are angular or multi-faceted as set forth in claims 2 and 15. The thermoplastic elastomer can be polyurethane as required by claim 10 and are agglomerated together by means of a binder that substantially fills the interstices between the chips and helps in bonding the chips together as set forth in claims 12-14. See pages 7 and 9. In addition, a pigment can be present as set forth in claim 11. See page 13. As to claims 3-4, it is the examiner's position that the chips necessarily have a smooth surface and are substantially free from dust.

Regarding claims 17 and 18, Kobayashi teaches the formation of a composition comprising a first component of a thermoplastic elastomer and a second component comprising a binding agent, wherein the binding agent can be a polyurethane binder. See page 7 and Example 1. As to claims 19-26, Kobayashi teaches in Example 3 and the Drawing the formation of an elastic paved surface having a thickness within the range set forth by applicants, further teaching alternate embodiments that include being laid in direct contact with the ground and being supported by a bulk layer.

Therefore, the prior art teachings of Kobayashi anticipate the invention as claimed in claims 1-6, 10-15 and 17-26.

4. Claims 1-6, 10-13, 15, 19-20, and 22-23 are rejected under 35 U.S.C. 102(b) as being anticipated by Biotteau, 4,337,292.

Biotteau teaches sheet material for use on playing surfaces comprising granules of thermoplastic elastomer having a particle size of between 0.5 and 5mm, as required by claims 1 and 5-6. See col. 2, lines 7-15. It is the position of the examiner that the granules are angular or multi-faceted, have a smooth surface and necessarily are substantially free from dust as set forth in claims 2-4. In addition, Biotteau teaches that the thermoplastic elastomer can be polyurethane and that the granules are held together by a binder that substantially fills the interstices between the granules, wherein the binder composition contains a pigment as required by claims 10-13 and 15. See Example 1.

As to claims 19-20 and 22-23, Biotteau teaches playing surfaces comprising his sheet material which can be laid in direct contact with the ground, and that the layer of thermoplastic elastomer granules and binder are supported by an underlying bulk layer of fibers. See col. 1, lines 38-62.

Accordingly, the prior art teachings of Biotteau anticipate the invention as claimed in present claims 1-6, 10-13, 15, 19-20 and 22-23.

***Claim Rejections - 35 USC § 103***

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claims 8-9 and 16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Japanese Patent translation JP54-48927 (Kobayashi) or Biotteau, 4,337,292, each in view of Auerbach et al, 3,916,969 (Auerbach) and Bartley et al, 4,201,261 (Bartley).

Kobayashi is as set forth above but does not teach a styrene copolymer or blend of polypropylene and ethylene-propylene copolymer as the thermoplastic elastomer. Nonetheless, Kobayashi teaches that ethylene propylene rubber can be used as well as tire chips.

Auerbach and Bartley each teach tires formed from elastomeric materials, wherein Auerbach teaches that the elastomer can be a styrene copolymer such as styrene-butadiene-styrene (see col. 4, lines 45-50) and Bartley teaches copolymers of ethylene and propylene that can be blended with polypropylene. See col. 2, lines 35-55.

As set forth above, Kobayashi teaches that chips formed from tires can be used as his elastomeric granules. It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the teachings of Kobayashi by using any elastomeric tire material known in the art, including those taught by Auerbach and Bartley with the reasonable expectation of success of obtaining tire chips that are highly elastic so as to provide elasticity to paved surface. Moreover, the utility of known tire material is also resource saving and cheap.

Applicants arguments regarding Kobayashi have been fully considered but at not found to be persuasive. In particular, applicants argue that since Kobayashi teaches

Art Unit: 1774

polyurethane rubber, this is a clear indication of a vulcanized material and not the thermoplastic elastomer.

In this regard, Kobayashi teaches "polyurethane rubber, etc. as well as their vulcanized rubber..." It is the examiner's position that this teaching clearly suggests that Kobayashi contemplates both the unvulcanized state and vulcanized state of the coarse grained rubber and fine grained rubber. Hence, it is the position of the examiner that Kobayashi is not limited solely to vulcanized polyurethane, but embraces unvulcanized polyurethane, or more specifically, thermoplastic elastomeric polyurethane.

No claims are allowed.

### ***Conclusion***

7. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. The prior art shows the general level of knowledge and skill in the art at the time the invention was made.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jill M Gray whose telephone number is 703.308.2381. The examiner can normally be reached on 10:00-7:00.

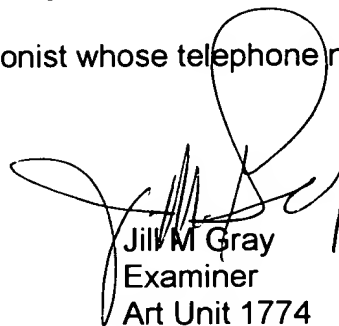
If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Cynthia Kelly can be reached on 703.308.0449. The fax phone numbers for the organization where this application or proceeding is assigned are 703.305.5408 for regular communications and 703.305.3599 for After Final communications.

Application/Control Number: 09/485,034

Page 7

Art Unit: 1774

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703.308.0651.



Jill M Gray  
Examiner  
Art Unit 1774

jmg  
April 6, 2003